

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 October 2004 (07.10.2004)

PCT

(10) International Publication Number
WO 2004/084982 A1

(51) International Patent Classification⁷: **A61M 16/00,**
16/20

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(21) International Application Number:
PCT/IB2004/001298

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(22) International Filing Date: 24 March 2004 (24.03.2004)

(25) Filing Language: English

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

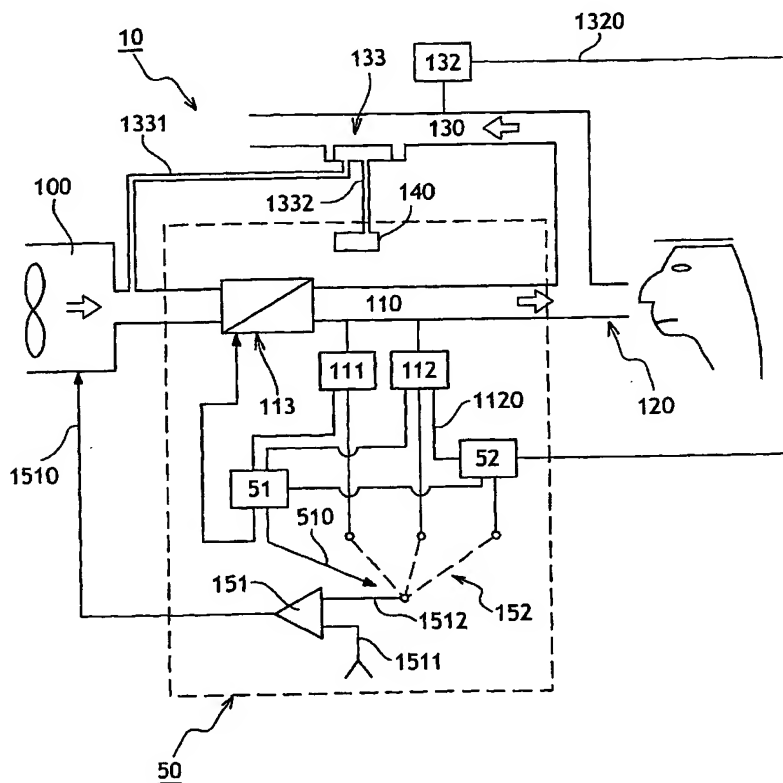
(26) Publication Language: English

(30) Priority Data:
03/03538 24 March 2003 (24.03.2003) FR
60/495,923 18 August 2003 (18.08.2003) US

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(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
[Continued on next page]

(54) Title: BREATHING ASSISTANCE APPARATUS



(57) Abstract: This invention concerns a breathing assistance apparatus capable of operating in alternating inhalation and expiratory phases wherein; a) the control means of the apparatus comprise selection means (152) capable of selecting a pressure parameter or a flow rate parameter to define; b) the said reference value for the gas source, the said selection means are controlled by an automatic control unit (51), the said control unit being: I) connected to pressure and flow rate sensors situated on the inhalation duct to form a direct closed regulation loop for selecting a reference value parameter, II) associated to a programme allowing the selection to be made in real time from a pressure or flow rate signal, so that the association of a direct closed regulation circuit for the selection of a reference value parameter with a valve permitting proportional operation, allows real time control of barometric and volumetric operating modes of the apparatus, between the inhalation and expiratory phases and during these phases. The invention also concerns associated operating processes.



GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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